

WHAT IS CLAIMED IS:

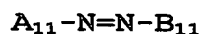
1. An ink obtained by dissolving at least one dye of an azo dye having a heterocyclic group or a phthalocyanine dye in an aqueous medium, wherein the dyes contained in said ink have a solubility of 15 g or more in 100 g of water at 25°C under atmospheric pressure.

2. The ink as claimed in claim 1, wherein the oxidation potential of at least one dye of an azo dye or an phthalocyanine dye is more positive than 1.0 V (vs SCE).

3. The ink as claimed in claim 1, wherein said azo dye has two heterocyclic groups and said phthalocyanine dye has at least one bond of -SO- or -SO<sub>2</sub>-.

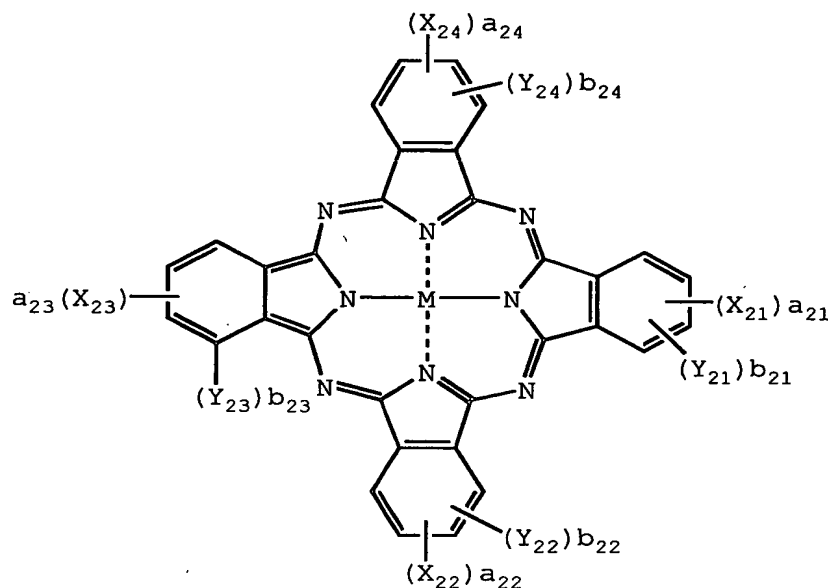
4. The ink as claimed in claim 1, wherein said azo dye or phthalocyanine dye is represented by the following formula (1), (2), (3) or (4):

Formula (1):



wherein A<sub>11</sub> and B<sub>11</sub> each independently represents a heterocyclic group which may be substituted;

Formula (2):



wherein  $X_{21}$ ,  $X_{22}$ ,  $X_{23}$  and  $X_{24}$  each independently represents  $-\text{SO}-Z_2$ ,  $-\text{SO}_2-Z_2$ ,  $-\text{SO}_2\text{NR}_{21}\text{R}_{22}$ , a sulfo group,  $-\text{CONR}_{21}\text{R}_{22}$  or  $-\text{COOR}_{21}$ ,

each  $Z_2$  independently represents a substituted or unsubstituted alkyl group, a substituted or unsubstituted cycloalkyl group, a substituted or unsubstituted alkenyl group, a substituted or unsubstituted aralkyl group, a substituted or unsubstituted aryl group or a substituted or unsubstituted heterocyclic group,

$\text{R}_{21}$  and  $\text{R}_{22}$  each independently represents a hydrogen atom, a substituted or unsubstituted alkyl group, a substituted or unsubstituted cycloalkyl group, a substituted or unsubstituted alkenyl group, a substituted or unsubstituted aralkyl group, a substituted or unsubstituted aryl group or a substituted or unsubstituted

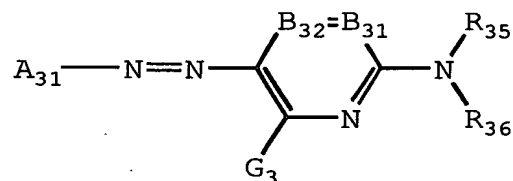
heterocyclic group,

$Y_{21}$ ,  $Y_{22}$ ,  $Y_{23}$  and  $Y_{24}$  each independently represents a monovalent substituent,

$a_{21}$  to  $a_{24}$  and  $b_{21}$  to  $b_{24}$  represent the number of substituents  $X_{21}$  to  $X_{24}$  and  $Y_{21}$  to  $Y_{24}$ , respectively,  $a_{21}$  to  $a_{24}$  each independently represents a number of 0 or an integer of 1 to 4 but all are not 0 at the same time, and  $b_{21}$  to  $b_{24}$  each independently represents a number of 0 or an integer 1 to 4, provided that when  $a_{21}$  to  $a_{24}$  and  $b_{21}$  to  $b_{24}$  each represents a number of 2 or more, the plurality of  $X_{21}S$ ,  $X_{22}S$ ,  $X_{23}S$ ,  $X_{24}S$ ,  $Y_{21}S$ ,  $Y_{22}S$ ,  $Y_{23}S$  or  $Y_{24}S$  may be the same or different, and

M represents a hydrogen atom, a metal atom or an oxide, hydroxide or halide thereof;

Formula (3):



wherein  $A_{31}$  represents a 5-membered heterocyclic group,

$B_{31}$  and  $B_{32}$  each represents  $=CR_{31}-$  or  $-CR_{32}=$  or either one of  $B_{31}$  and  $B_{32}$  represents a nitrogen atom and the other represents  $=CR_{31}-$  or  $-CR_{32}=$ ,

$R_{35}$  and  $R_{36}$  each independently represents a hydrogen atom, an aliphatic group, an aromatic group, a heterocyclic group, an acyl group, an alkoxycarbonyl group, an

aryloxycarbonyl group, a carbamoyl group, an alkylsulfonyl group, an arylsulfonyl group or a sulfamoyl group, and each group may further have a substituent,

G<sub>3</sub>, R<sub>31</sub> and R<sub>32</sub> each independently represents a hydrogen atom, a halogen atom, an aliphatic group, an aromatic group, a heterocyclic group, a cyano group, a carboxyl group, a carbamoyl group, an alkoxycarbonyl group, an aryloxycarbonyl group, a heterocyclic oxycarbonyl group, an acyl group, a hydroxy group, an alkoxy group, an aryloxy group, a heterocyclic oxy group, a silyloxy group, an acyloxy group, a carbamoyloxy group, an alkoxycarbonyloxy group, an aryloxycarbonyloxy group, an amino group (including an arylamino group and a heterocyclic amino group), an acylamino group, a ureido group, a sulfamoylamino group, an alkoxycarbonylamino group, an aryloxycarbonylamino group, an alkylsulfonylamino group, an arylsulfonylamino group, a heterocyclic sulfonylamino group, a nitro group, an alkylthio group, an arylthio group, an alkylsulfonyl group, an arylsulfonyl group, a heterocyclic sulfonyl group, an alkylsulfinyl group, an arylsulfinyl group, a heterocyclic sulfinyl group, a sulfamoyl group, a sulfo group or a heterocyclic thio group, and each group may be further substituted, and

R<sub>31</sub> and R<sub>35</sub>, or R<sub>35</sub> and R<sub>36</sub> may combine to form a 5- or 6-membered ring;

Formula (4):



wherein  $A_{41}$ ,  $B_{41}$  and  $C_{41}$  each independently represents an aromatic group which may be substituted, or a heterocyclic group which may be substituted.

5. The ink as claimed in any one of claims 1 to 4, wherein said ink is used for an inkjet.

6. An ink set comprising inks, the constituent inks all being the ink claimed in any one of claims 1 to 5.